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PARTS LIST SD7

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SINCE ONLY THE UNIDENTICAL PARTS BETWEEN THE ORIGINAL MODEL ARE LISTED. PLEASE USE THIS MANUAL(FLYSHEET) WITH THE ORIGINAL MODEL SD9000 SERVICE MANUAL.

Subject to modification
4822 725 50621
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REF. DESIG.	SD9000(N) PART NO.	QTY.	SD7 PART NO.	QTY.	DESCRIPTION
A	4280063430	1	4280063450	1	FRONT PANEL ASSY
B	4279053400	1	4279053430	1	COVER ASS'Y
C	4280053410	1	4280053440	1	HEAD COVER ASS'Y
D	4279063420	1	4279063450	1	ESCUTCHEON ASS'Y
E	4279302400	1	4279302420	1	DIAL ASS'Y
S501	SK10240010	1	SK10240030	1	KEYBOARD SW 24
001V			2269253510	2	HANDLE
007V			51217069E9	4	L.K.HEAD SCREW
008V			59051208B0	4	WASHER
009V			51147019B0	4	O.C.H.M.SCREW
010V			54120500B0	4	DOUGHWOT WASHER
011V			51280410U0	6	B.H.TAP SCREW
012V			2945811020	1	POLYETHY BAG
013V			9012020010	2	POLYETHY BAG
018V			2461801100	1	PACKING CASE
019V			2269851010	1	INSTRUCTIONS
015B	4279259010	1	4279259020	1	BUSHING
018B	4279154020	6	4279154090	6	KNOB
026B	4276259010	1	4276259050	1	BUSHING
031B	2127259010	1	2127259110	1	BUSHING
001B	4279053010	1	4279053060	1	COVER
008B	4279063030	1	4279063160	1	ESCUTCHEON
011B	4279063060	1	4279063180	1	ESCUTCHEON
012B	4279063070	1	4279063190	1	ESCUTCHEON
014B	4279063040	1	4279063170	1	ESCUTCHEON
027B	4279154070	1	4279154100	1	KNOB
044B	4278154010	1	4278154070	1	KNOB
045B	4278154020	2	4278154080	2	KNOB
046B	4278154030	2	4278154090	2	KNOB
901B	4280063020	1	4280063040	1	ESCUTCHEON
902B	4279118010	2	4279118030	2	SPACER
903B	4279053030	1	4279053070	1	COVER
904B	4279158060	1	4279158070	1	WINDOW
906B	4279154010	4	4279154110	4	KNOB
907B	4276154010	2	4276154070	2	KNOB
908B	4276154010	3	4276154070	3	KNOB
909B	2970154020	3	2970154320	3	KNOB
926B	4280160020	1	4280160040	1	BRACKET
001U	4279809010	2			CUSHION
001U			4280801040	1	PACKING CASE
002U			4279809010	2	CUSHION
004U			2918107150	1	SHEET
005U			9090909040	1	POLYETHY SHEET
006U			2731821010	1	SILICAGEL
008U			4280809010	1	CUSHION
010U			9526019030	2	SERIAL NO CARD
901U	4280801020	1			PACKING CASE
903U	2918107150	1			SHEET
905U	9526019030	2			SERIAL NO CARD
906U	9090909040	1			POLYETHY SHEET
910U	2731821010	1			SILICAGEL
001T	4279851310	1	4279851350	1	INSTRUCTIONS
002T	4280851360	1	4280851360	1	INSTRUCTIONS
003T	4280851350	1			INSTRUCTIONS

SERVICE MANUAL

Since only the unidentical parts between the original model are listed, please use this manual (Flysheet) with the original model SD9000 (U version) service manual accordingly.

Different Parts between MODEL SD9000 (U) and MODEL SD9020 (N).

Original Model SD9000 Page 51

REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
A	1	1	4280063400	4280063440	Front Panel Assembly
031B	1	1	2127259010	216H259010	Bushing
901B	1	1	4280063010	4280063030	Escutcheon
902B	2	2	4279118010	4279118050	Spacer
025B	4		59046502G9		Washer
030B	1	1	2127154010	216H154010	Knob Power SW
032B	2		2127115010		Spring
044B	1	1	4278154010	4278154040	Knob Output
045B	2	2	4278154020	4278154050	Knob Record
046B	2	2	4278154030	4278154060	Knob Record
909B	3	3	2970154020	2970154220	Knob, Lever SW

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
055B	1		4279257010		Lid, Top Cover
944B		1		4279257040	Lid, Top Cover
947B		1		4581861010	Label

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
926B	1	1	4280160010	4280160030	Bracket Rear Panel
931B	1		1455259030		Bushing
T002	1	1	TS15406240	TS15406250	Power Transformer
W001	1	1	YC02000140	ZC01805030	AC Power Cord
F001		1		FS10080800	Fuse
J005		1		YJ08000290	Jack
J006		1		YP04000610	Plug
J007		1		BY05080010	Voltage Selector

N.B. Following precautions should be used when putting order for service manual:

(1) The original Service manual will not be delivered if the P/N 4280855080 (Flysheet) is used for ordering.

(2) When comperhensive manual are required, please use both P/N of 4280855010 (Original) and 4280855080 (Flysheet) simultaneously.

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
E	1	1	4279302400	4279302420	Dial Assembly LED
913B	1	1	4279302010	4279302030	Dial, LED Meter
027B	1	1	4279154070	4279154080	Knob, Rec Mute
034B		1		4279118040	Spacer
J001	1	1	YJ01001110	YJ01001120	Jack Mic (L)
J002	1	1	YJ01001110	YJ01001120	Jack Mic (R)
S001	1	1	SP01010280	SP01010410	Push Switch Power
980F		1		59030810P0	Washer
990F		1		4279104020	Retaine
991F		1		51280308B0	B.H. Tapped Screw

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
B	1	1	4279053400	4279053420	Cover Assembly
001B	1	1	4279053010	4279053050	Cover
004B	1	1	4279063050	4279063110	Escutcheon
C	1	1	4280053410	4280053430	Head Cover Assembly
011B	1	1	4279063060	4279063120	Escutcheon (L)
012B	1	1	4279063070	4279063130	Escutcheon (R)
D	1	1	4279063420	4279063440	Escutcheon Assembly
014B	1	1	4279063040	4279063100	Escutcheon
008B	1	1	4279063030	4279063090	Escutcheon

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
T001	1	1	TS16621010	TS16621020	Power Transformer
941F		1		3890160040	Bracket
942F		1		51100306A9	B.H.M. Screw B3 x 6
943F		1		51100306A9	B.H.M. Screw B3 x 6

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
001T	1	1	4279851210	4279851350	Instructions
002T	1	1	4280851220	4280851330	Instructions
004T		1		4280856010	Circuit Diagram
901U	1	1	4280801010	4280801030	Packing Case
905U	2	2	9526019010	9526019030	Serial No. Card
910U		1		2731821010	Silicagel

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
C228	1	1	DF15333300	DF15103350	Film 0.01μF ±5%
C229		1		EA10602530	Elect 10μF 25V

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
R116	1	1	GG05101140	GG05470140	Resistor 47Ω
R119	1	1	GD05562140	GD05472140	Resistor 4.7KΩ
R120	1	1	GD05472140	GD05392140	Resistor 3.9KΩ
R121	1	1	GD05133140	GD05103140	Resistor 10KΩ
R140	1	1	GD05101140	GD05100140	Resistor 10Ω
R152	1	1	GD05821140	GD05820140	Resistor 82Ω
R154	1	1	GD05821140	GD05820140	Resistor 82Ω
R159		1		GD05152140	Resistor 1.5KΩ
R179	1	1	GG05101140	GG05470140	Resistor 47Ω
R190		1		GD05822140	Resistor 8.2KΩ
R216	1	1	GG05101140	GG05470140	Resistor 47Ω
R219	1	1	GD05562140	GD05472140	Resistor 4.7KΩ
R220	1	1	GD05472140	GD05392140	Resistor 3.9KΩ

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
R221	1	1	GD05133140	GD05103140	Resistor 10KΩ
R240	1	1	GD05101140	GD05100140	Resistor 10Ω
R254	1	1	GD05821140	GD05820140	Resistor 82Ω
R259		1		GD05152140	Resistor 1.5KΩ
R279	1	1	GG05101140	GG05470140	Resistor 47Ω
R290		1		GD05822140	Resistor 8.2KΩ
R322	1	1	GD05393140	GD05823140	Resistor 32KΩ
R331		1		GD05333140	Resistor 33KΩ

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
J303	1	1	YT02040260	YT02050020	Terminal
C518	1	1	DF15472300	DF15152300	Film 0.0015μF ±5%
C519	1		DD15330370		Ceramic 33pF ±5%
C527	1		DD15330370		Ceramic 33pF ±5%
C531	1	1	EA22601630	EA33601630	Elect 33μF 16V
C536		1		EA47602530	Elect 47μF 25V
C537		1		DF15103300	Film 0.01μF 50V

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
R506	1	1	GD05562140	GD05102140	Resistor 1KΩ
R525	1	1	GD05152140	GD05333140	Resistor 33KΩ
R545	1	1	GD05681140	GD05561140	Resistor 560Ω
R546	1	1	GD05821140	GD05561140	Resistor 560Ω
R568	1	1	GD05331140	GD05151140	Resistor 150Ω
R600		1		GD05103140	Resistor 10KΩ

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
R695	1	1	GD05223140	GD05222140	Resistor 2.2KΩ
R733		1		GD05562140	Resistor 5.6KΩ
R734		1		GD05104140	Resistor 100KΩ
R735		1		GD05133140	Resistor 13KΩ
Q557	1	1	HD10001010	HD10004020	Diode 0A-91
Q558	1	1	HD10001010	HD10004020	Diode 0A-91

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
Q611		1		HD20011050	Diode 1S155
Q612		1		HD20011050	Diode 1S155
Q613		1		HD20011050	Diode 1S155
Q623	1	1	HD10001010	HD10004020	Diode 0A-91
Q624	1	1	HD10001010	HD10004020	Diode 0A-91
L501	1	1	LI10015010	LO10105010	O.S.C. Coil

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
C701	1	1	DF15223350	DF15683350	Film 0.068μF 50V
C702	1	1	EA10505030	EA22505030	Elect 2.2μF 50V
Q776		1		HD20001210	Diode 1S2473
Q777		1		HF10051280	F.E.T. 2SJ51
CM16	1	1	EA47405030	EA10405030	Elect 1μF 50V

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
RM11	1	1	RA01020300	RA05020180	Resistor 5KΩ
RM44	1	1	GD05104140	GD05473140	Resistor 47KΩ
QM21	1	1	HC452800B0	HC10040060	IC UPD4528C
C424	1	1	EA22802530	EA10802530	Elect 1000μF 25V
C434	1	1	EA47702530	EA47706330	Elect 470μF 630V
C449		1		EA10802530	Elect 1000μF 50V

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
Q421	1	1	HT403131F0	HT40718180	Transistor 2SD718
C501	4		DD15620360		Ceramic 62pF ±5%
C513	4		EA10602530		Elect 10μF 25V
C517		4		DF15102300	Film 0.001μF ±5%
R501	4		GD05274140		Resistor 270KΩ
R502	4		GD05564140		Resistor 560KΩ
R508		4		GD05204140	Resistor 200KΩ
R509		4		GD05102140	Resistor 1KΩ
R510		4		GD05102140	Resistor 1KΩ
Q501	4	4	HC10001360	HC10007270	IC NF6468
Q502	4	4	HD20011050	HD20001210	Diode 1S2473

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REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
C802		1		DF17223800	Film Cap 0.022μF
L802	1	1	LY10120140	LY10120150	Relay G2W-1112V
Z801	1		BF10400030		Cap. Comp Spark Kiler
P900		1		WF42790020	P.W. Board Fuse
		1		ZZ42798020	P.W. Board Assembly
F901		1		FS10100800	Fuse 1A
F902		1		FS10200800	Fuse 2A

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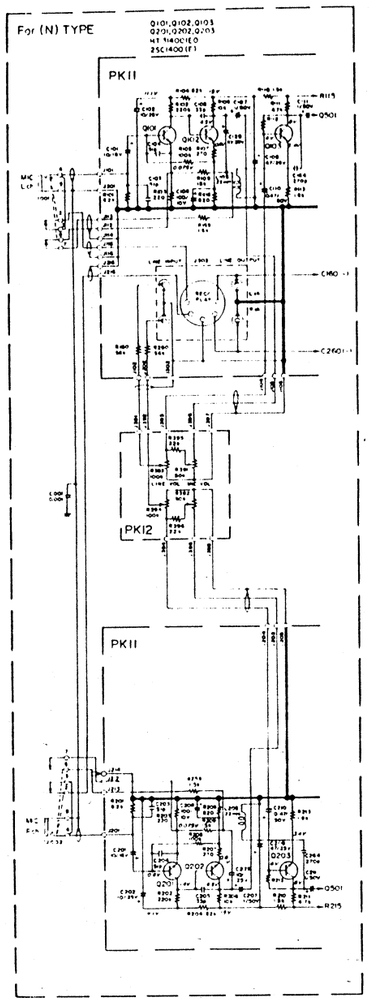
REF. DESIG.	Q'TY U	Q'TY N	MODEL SD9000 (U) PART NO.	MODEL SD9020 (N) PART NO.	DESCRIPTION
F903		1		FS10080800	Fuse 0.8A
F904		1		FS10140800	Fuse 1.4A
F905		1		FS10080800	Fuse 0.8A
J911 ~ J920		10		YJ08000200	Jack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Q201,Q202,Q203
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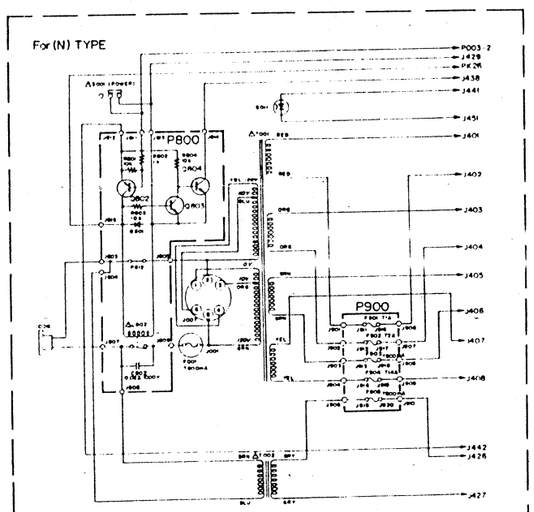
2SC1400(E1)
PK11
PK12
PK11
Q501
R215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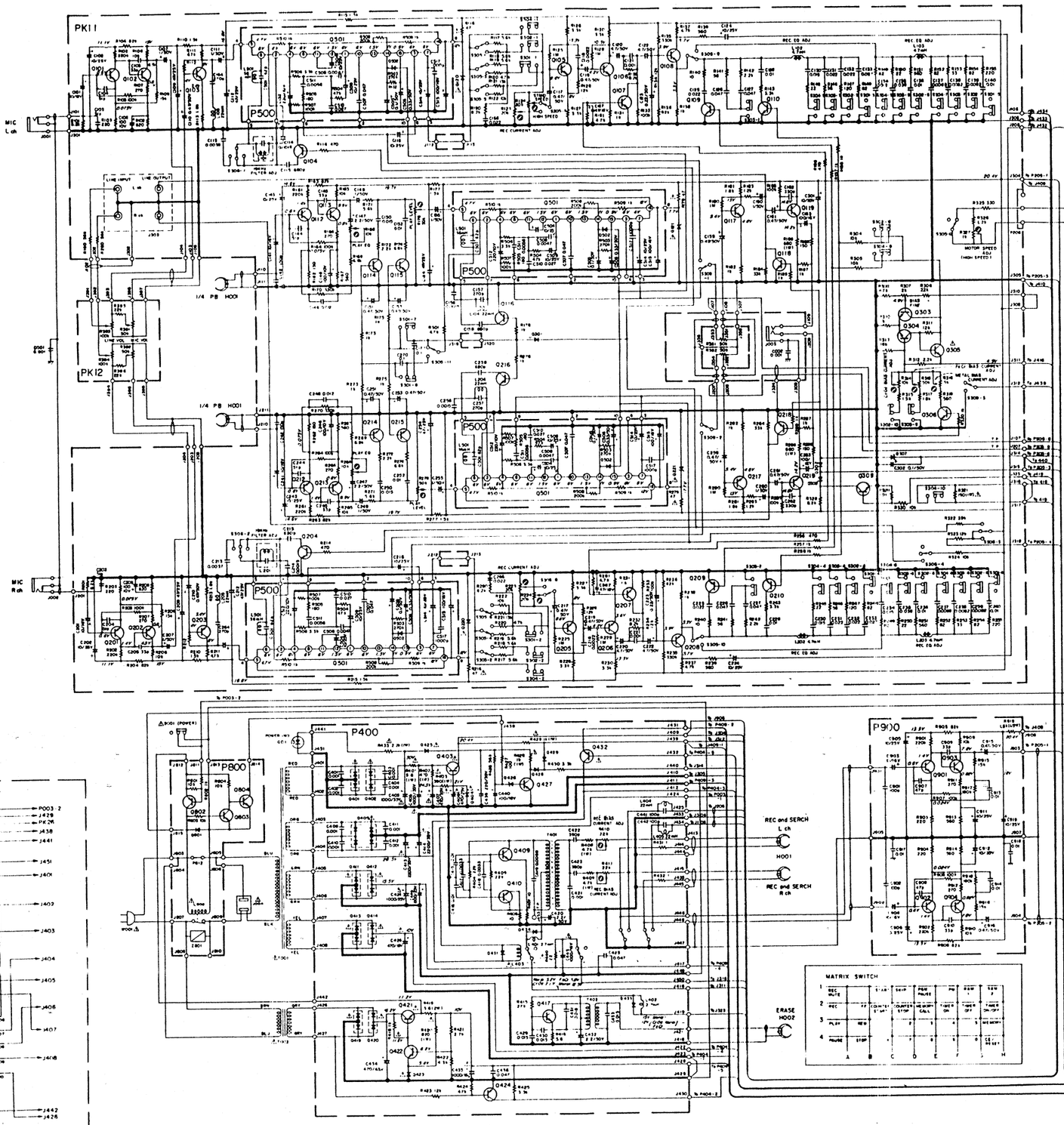
J427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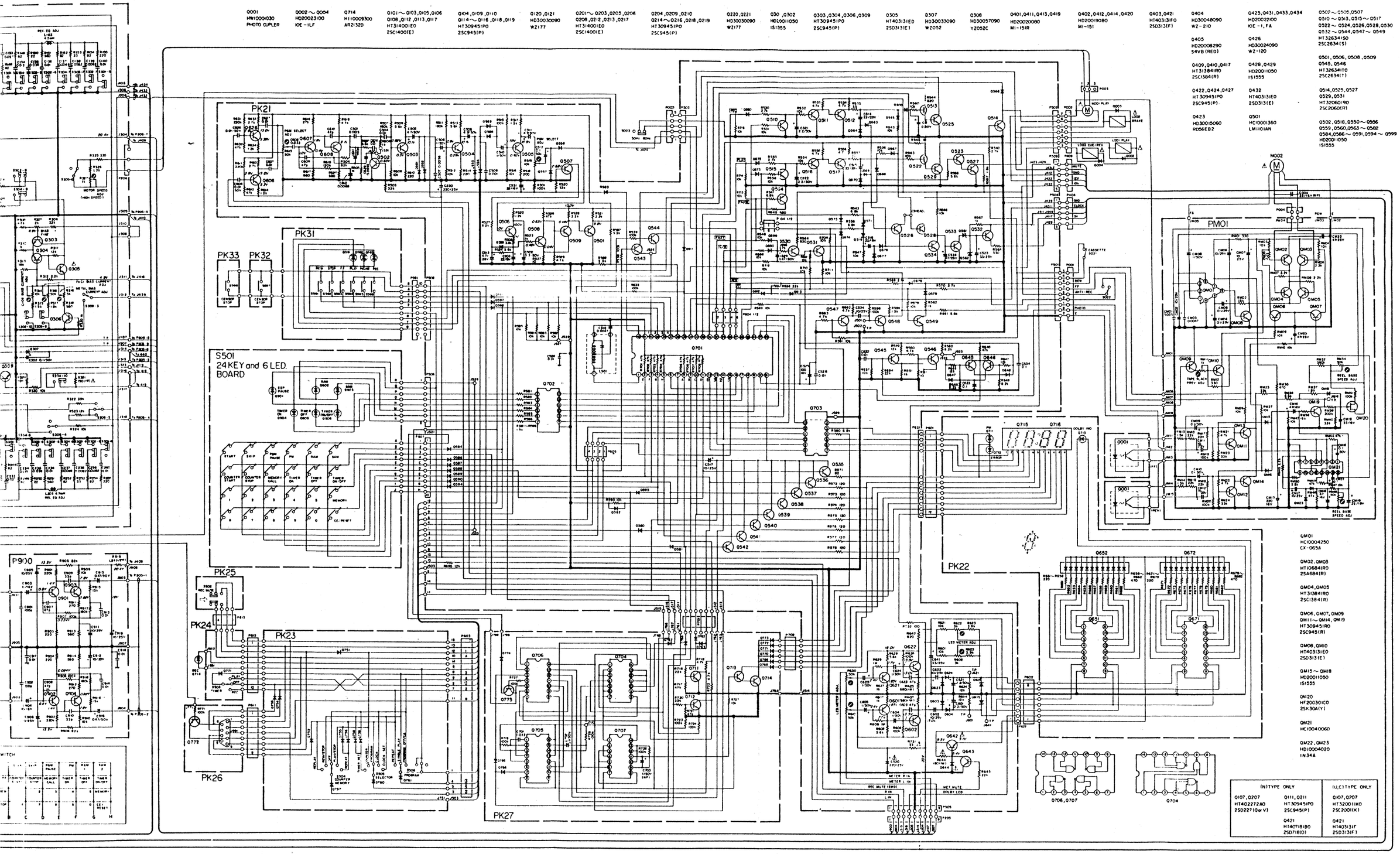
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PK31
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PK32
PK25
PK24
PK23
PK26
PK27
PK22
S501
24KEY and 6 LED.
BOARD
PMO1
P900
0701
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MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ Company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

ORDERING PARTS

Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from our National Parts Depot located at the following address:

SUPERSCOPE NATIONAL PARTS DEPARTMENT
20525 Nordhoff Street
Chatsworth, California 91311
Phone: 1-800-423-5108
1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

1. Complete address.
2. Complete part numbers.
3. Complete description of parts.
4. Model number for which part is required (indicate MARANTZ).
5. Account number (for account customers only).

Direct consumers will be provided with the current retail price quotation on available parts in order to advise them of the cost of the parts and shipping.

OVERSEAS PARTS ORDERING

Parts may also be ordered from the following overseas addresses:

CANADA

Superscope Canada, Ltd.
3710 Nashua Drive
Mississauga
Ontario, Canada L4V1M5

AUSTRALIA

Superscope (Australasia) Pty., Ltd.
32 Cross Street (P.O. Box 604)
Brookvale 2100 N.S.W.
Australia

JAPAN

Marantz Japan, Inc.
3622 Kamitsuruma
Sagamihara Shi
Kanagawa, Japan

EUROPE

Superscope Europe, S.A.
Avenue Leopold III, 2
7120 Peronnes-Lez-Binche
Belgium

Marantz France
Rue Louis Armand 9
92600 Asnieres
Hauts-de-Seine
France

Marantz Audio U.K. Ltd.
London Road, 203
Staines
Middlesex
England

Superscope GmbH
Max-Planck-Strasse 22
D-6072 Dreieich 1
West Germany

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please contact the nearest facility for the necessary assistance.

1. P.W. BOARD

As can be seen from the circuit diagram, the chassis, of the Model SD9000 consists of following units. Each unit mounted on a printed circuit board is described with in the square enclosed by bold dotted line on the circuit diagram.

Pre-Amp	mounted on P.W. Board	PK11
Mic & Line Vol	mounted on P.W. Board	PK12
Output Vol	mounted on P.W. Board	PK13
Power Supply	mounted on P.W. Board	P400
Computer	mounted on P.W. Board	PK21
Remote Jack	mounted on P.W. Board	PK26
Digital & Meter LED	mounted on P.W. Board	PK22
Program Selector	mounted on P.W. Board	PK23
Program	mounted on P.W. Board	PK27
Timer Switch	mounted on P.W. Board	PK24
Rec Mute Switch	mounted on P.W. Board	PK25
Timer Relay	mounted on P.W. Board	P800
Photo Cuppler	mounted on P.W. Board	P001
Mecha Logic Switch (Safety Switch)	mounted on P.W. Board	PK32 PK33
FF. Rew Gavernor	mounted on P.W. Board	PM01
Music Interval Detector	mounted on P.W. Board	P900
Dolby	mounted on P.W. Board	P500

2. PHASE COMPENSATOR ADJUSTMENT

SETUP

1. Power voltage: — 50/60 Hz
2. Input level: — 1 kHz, —60 dB (square wave)
3. Input terminal: — MIC
4. Tape speed selector switch: — HIGH
5. Dolby: — OFF
6. MPX: — OFF
7. Output: — Line Out (connect oscilloscope)

PROCEDURE

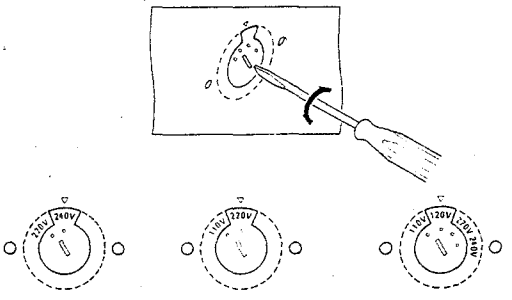
1. Set the tape in recording mode.
2. Depress the pause button to set the tape in REC-PAUSE mode.
3. Adjust the MIC volume control until the LED meter indicates 0 VU.
4. Reduce the MIC input level by 10 dB (—70 dB).
5. Under this condition, release the REC-PAUSE mode and start recording. Play the recorded tape and adjust R183 and R283 until the waveform shown below is obtained. If required, repeat recording and playback.

3. VOLTAGE CONVERSION FOR EUROPEAN MODEL

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

CAUTION:

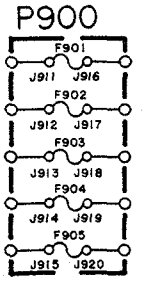
DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE. DO NOT DISASSEMBLE THE VOLTAGE SELECTOR ABSOLUTELY.

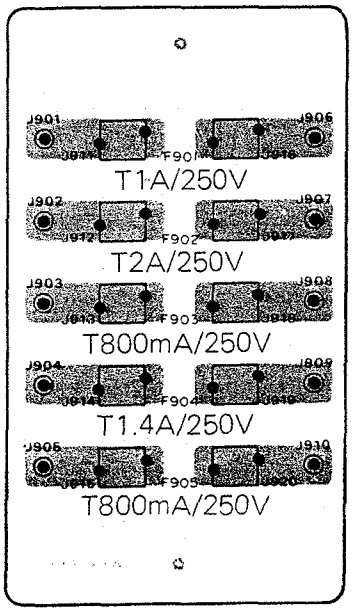


Note on safety:

The parts marked with ⚠ are important parts on the safety. Please use the parts having the designated parts number without fail.

4. FUSE ASSEMBLY (P900) SCHEMATIC DIAGRAM AND COMPONENT LOCATIONS (N Version only)



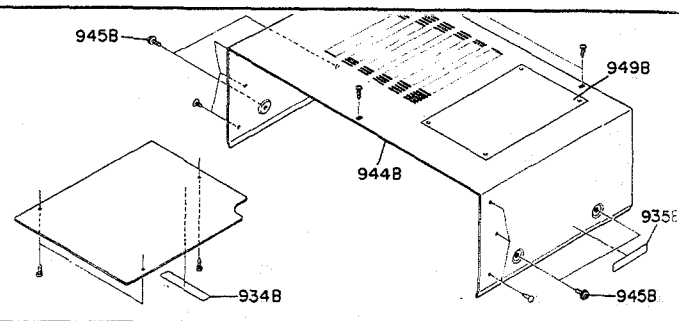


[P01-99] Front Panel (Page 51)

REF. DESIG.	Q'TY U	C	N	PART NO.	DESCRIPTION
A	1	1		4280063400	Front Panel Assembly
A1			1	4280063430	Front Panel Assembly
026B	1	1	1	4276259010	Bush, Rec Mute
031B	1	1	1	2127259010	Bush, Power Switch
040B	2	2	2	2112259030	Bush, Tape Selector
901B	1	1		4280063013	Escutcheon, Front Panel
901B			1	4280063020	Escutcheon, Front Panel
902B	2	2	2	4279118010	Spacer
910B	1	1	1	4280107010	Sheet, Lever Switch
044B	1	1		4278154010	Knob, Output
044B			1	4279154010	Knob, Output
909B	3	3	3	2970154024	Knob, Lever Switch

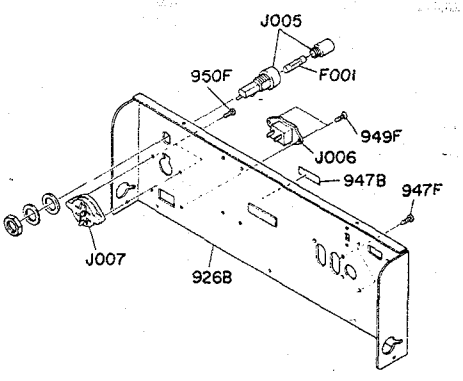
[P04-99] Top Cover and Main Chassis (Page 52)

934B			1	3889861010	Label
935B	1		1	2932861012	Label
944B	1	1	1	4279257012	Lid, Top Cover
945B	4	4	4	5148040689	F. Washer Screw F4 x 8
949B	1			4279107013	Sheet



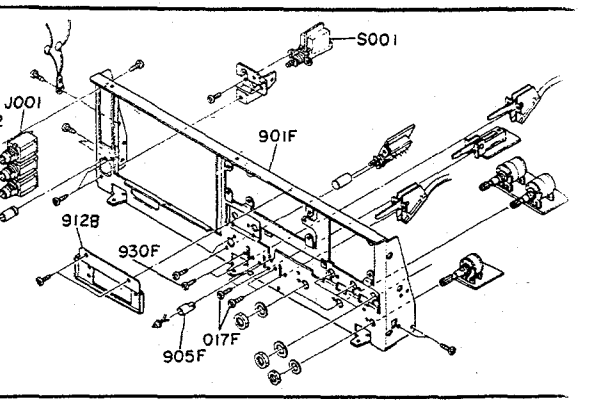
[P06-99] Rear Panel (Page 53)

926B	1	1		4280160014	Bracket, Rear Panel
926B			1	4280160020	Bracket, Rear Panel
947B			1	4581861010	Label, "Made in Japan"
935F	1	1	1	4279109042	Shield
947F			2	51280308U0	B.H. Tapped Screw B3 x 8
949F			2	51500308U0	F.H. Tapped Screw F3 x 8
950F			2	51280310U0	B.H. Tapped Screw B3 x 10
⚠F001			1	FS10080800	Fuse, 0.8A
⚠J005			1	YJ08000290	Jack, Fuse Holder
⚠J006			1	YP04000610	Plug, AC Inlet
⚠J007			1	BY05080013	Voltage Selector
⚠T002			1	TS15406250	Power Transf., Back up



[P03-99] Front Bracket (Page 54)

912B	1	1	1	4279303012	Mask
017F	4	4	4	51100306A9	B.H.M. Screw B3 x 6
901F	1	1	1	4279160013	Bracket, Front Chassis
905F	1	1	1	4279271012	Holder, Timer LED
930F	2	2	2	51100306A9	B.H.M. Screw B3 x 6
J001			1	YJ01001120	Jack, Mic (L)
J002			1	YJ01001120	Jack, Mic (R)
⚠S001			1	SP02010440	Push Switch, Power

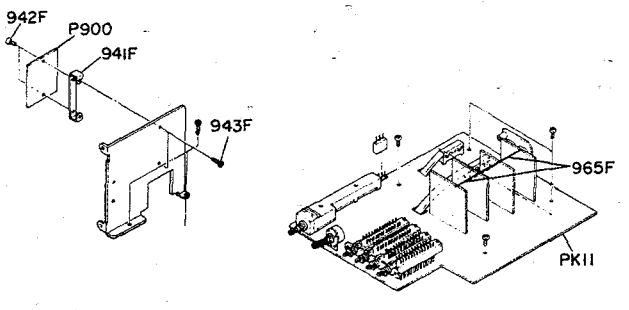


[P02-99] **Associated Mechanism for Cassette Tape Operation (Page 55)**

REF. DESIG.	Q'TY U	C	N	PART NO.	DESCRIPTION
B	1	1	1	4279053400	Cover Assembly
001B	1	1	1	4279053016	Cover, Mechanism
002B	2	2	2	65010306G0	Dodge Insert, S
003B	2	2	2	4279353010	Ring, Reel
004B	1	1	1	4279063053	Escutcheon, Cassette
005B	1	1	1	4279274010	Refrector
C	1	1	1	4280053410	Head Cover Assembly
011B	1	1	1	4279063060	Escutcheon, Head Cover (L)
012B	1	1	1	4279063070	Escutcheon, Head Cover (R)
903B	1	1	1	4279053033	Cover, Head
D	1	1	1	4279063420	Escutcheon Assembly
014B	1	1	1	4279063042	Escutcheon
015B	1	1	1	4279259010	Bush
904B	1	1	1	4279158063	Window, Azimuth Cover

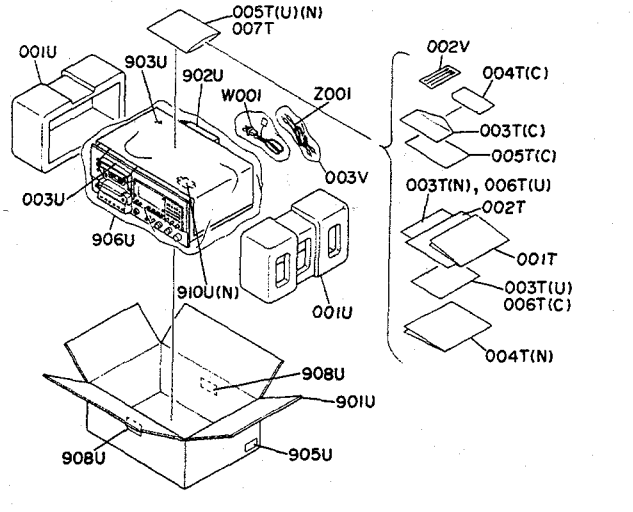
[P05-99] **P.W. Board and General Parts (Page 56)**

053F	2	2	2	51280410B0	B.H. Tapped Screw	B4 x 10
907F	1	1	1	4279109022	Shield	
910F	2	2	2	4279160082	Bracket	
941F			1	3890160040	Bracket	
942F			2	51100306A9	B.H.M. Screw	B3 x 6
943F			2	51100306A9	B.H.M. Screw	B3 x 6
965F	2	2	2	4280115010	Spring	
⚠T001	1			TS16621010	Power Transformer	
⚠T001		1		TS16621040	Power Transformer	
⚠T001			1	TS16621020	Power Transformer	



[H01-99] **Packing Materials (Page 61)**

001T	1	1		4279851210	Instructions
001T			1	4279851310	Instructions
002T	1	1		4280851220	Instructions
002T			1	4280851320	Instructions
003T	1			2818854027	Guarantee Card
003T		1		2918813012	Envelope
003T			1	4280851350	Instructions
004T		1		9630000180	Guarantee Card
004T			1	4280856010	Circuit Diagram
005T	1		1	9013025010	Polyethylene Bag
005T		1		9650000053	S. Station Card
006T		1		2818854043	Guarantee Card
006T	1			102H851040	Instructions
007T		1		9013025010	Polyethylene Bag
001U	2	2	2	4279809010	Cushion
003U	1	1	1	4279269010	Protector
901U	1	1		4280801010	Packing Case
901U			1	4280801020	Packing Case
902U	1	1	1	2864804010	Sleeve
903U	1	1	1	2918107150	Sheet
905U	2			9526109010	Serial No. Card
905U		2		9526109020	Serial No. Card
905U			2	9526109030	Serial No. Card
906U	1	1	1	9090909040	Polyethylene Sheet
908U		2		9510901020	Label, Address
910U			1	2731821012	Silicagel
002V	1	1	1	4136071010	Cleaner
003V	1	1	1	9011325010	Polyethylene Bag
⚠W001			1	ZC01805020	AC Power Cord, 1.8m
Z001	2	2	2	ZD01000170	Connective Cord



REF. DESIG.	Q'TY U	C	N	PART NO.	DESCRIPTION
					PK11-PRE-AMP CIRCUIT BOARD
PK11	1	1	1	YK42801312	P.W. Board, Pre-Amp
	1	1		ZZ42801310	P.W. Board Assembly
			1	ZZ42808310	P.W. Board Assembly
					PK11-CAPACITORS
C126	1	1		DF15473300	Film 0.047μF ±5%
C126			1	DF15823300	Film 0.082μF ±5% 50V
C127	1	1		DF15473300	Film 0.047μF ±5%
C127			1	DF15563300	Film 0.056μF ±5% 50V
C166	1	1		DF15223300	Film 0.022μF ±5% 50V
C221	1	1		DF15122300	Film 1200pF ±5%
C221			1	DF15102300	Film 1000pF ±5% 50V
C226	1	1		DF15473300	Film 0.047μF ±5%
C226			1	DF15823300	Film 0.082μF ±5% 50V
C227	1	1		DF15473300	Film 0.047μF ±5%
C227			1	DF15563300	Film 0.056μF ±5% 50V
C228	1	1	1	DF15103300	Film 0.01μF ±5%
C266	1	1		DF15223300	Film 0.022μF ±5% 50V
					PK11-RESISTORS (All Resistors are ±5% and ¼W)
R119	1	1	1	GD05472140	4.7KΩ
R120	1	1	1	GD05392140	3.9KΩ
R121	1	1	1	GD05103140	10KΩ
R140	1	1		GD05101140	100Ω
R140			1	GD05100140	10Ω
R141	1	1		GD05560140	56Ω
R141			1	GD05820140	82Ω
R146	1	1		GD05560140	56Ω
R146			1	GD05150140	15Ω
R151	1	1	1	GD05102140	1KΩ
R152	1	1	1	GD05820140	82Ω
R154	1	1	1	GD05820140	82Ω
R168	1	1	1	RA01030510	10KΩTrim., Play back EQ.
R176	1	1	1	RA05030280	50KΩTrim., Play back Level
R190	1	1		GD05822140	8.2KΩ
R190			1	GD05272140	2.7KΩ
R219	1	1	1	GD05472140	4.7KΩ
R220	1	1	1	GD05392140	3.9KΩ
R221	1	1	1	GD05103140	10KΩ
R223	1	1	1	RA02030170	20KΩTrim., Rec. Level Adj.
R224	1	1	1	RA02030170	20KΩTrim., Rec. Level Adj.
R240	1	1	1	GD05100140	10Ω
R241	1	1		GD05560140	56Ω
R241			1	GD05820140	82Ω
R246	1	1		GD05560140	56Ω
R246			1	GD05150140	15Ω
R254	1	1	1	GD05820140	82Ω
R268	1	1	1	RA01030510	10KΩTrim., Play back EQ.
R276	1	1	1	RA05030280	50KΩTrim., Play back Level
R290	1	1		GD05822140	8.2KΩ
R290			1	GD05272140	2.7KΩ
R314	1	1	1	RA01030510	10KΩTrim., CrO_2 Bias Adj.
R316	1	1	1	RA05030280	50KΩTrim., FeCr Bias Adj.
R318	1	1		RA05020160	5KΩTrim., Metal Bias Adj.
R318			1	RA05020300	5KΩTrim., Metal Bias Adj.
R327	1	1	1	RA01020350	1KΩTrim., High-Speed Adj.

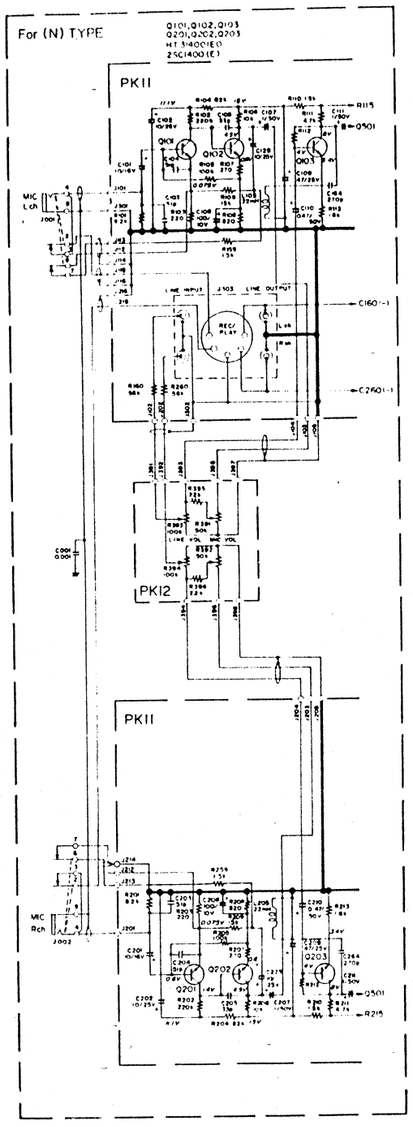
REF. DESIG.	Q'TY U	C	N	PART NO.	DESCRIPTION
					PK11-SEMICONDUCTORS
Q107	1	1		HT320011K0	Transistor 2SC2001(K)
Q107			1	HT402272A0	Transistor 2SD227(Q or V)
Q207	1	1		HT320011K0	Transistor 2SC2001(K)
Q207			1	HT402272A0	Transistor 2SD227(Q or V)
					PK11-MISCELLANEOUS
J101	57	47	47	YP10001130	Plug, Wire Wrap
J303	1	1		YT02040260	Terminal, (4P) RCA
J303			1	YT02050020	Terminal, (4P) RCA and DIN
					P400-POWER SUPPLY & BIAS OSC CIRCUIT BOARD
p400	1	1	1	YF42790042	P.W. Board, Power Supply & Bias OSC
	1	1		ZZ42800040	P.W. Board Assembly
			1	ZZ42808040	P.W. Board Assembly
					P400-CAPACITORS
⚠ C424	1	1	1	EA10802530	Elect 1000μF 25V
C431	1	1		DF75183510	Film 0.018μF ±5%
C431			1	DF75473510	Film 0.047μF ±5% 100V
C449	1	1	1	EA10802530	Elect 1000μF 25V
					P400-SEMICONDUCTORS
Q421	1	1		HT403131F0	Transistor 2SD313(F)
Q421			1	HT407181B0	Transistor 2SD718(O)
P455	4	4	4	3444118050	Spacer, Steatite
					P800-TIMER RELAY CIRCUIT BOARD
P800	1	1	1	YF42790050	P.W. Board, Timer Relay
	1	1		ZZ42790050	P.W. Board Assembly
			1	ZZ42798050	P.W. Board Assembly
					P800-MISCELLANEOUS
C802			1	DF17223800	Film 0.022μF 1000V
⚠ L802	1	1		LY10120140	Relay, G2W-1112V UL. CSA.
⚠ L802			1	LY10120150	Relay, G2W-1112V SEMCO
					P900-FUSE CIRCUIT BOARD
P900			1	WF42790022	P.W. Board, Fuse
			1	ZZ42798020	P.W. Board Assembly
⚠ F901			1	FS10100800	Fuse 1A
⚠ F902			1	FS10200800	Fuse 2A Logic
⚠ F903			1	FS10080800	Fuse 0.8A Motor
⚠ F904			1	FS10140800	Fuse 1.4A LED Meter
⚠ F905			1	FS10080800	Fuse 0.8A E SP
J911 ~ J920			10	YJ08000200	Jack, Fuse Clip

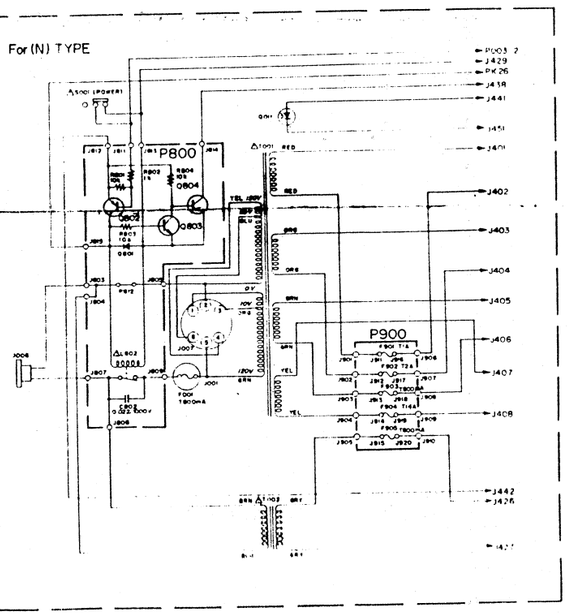
(W01-99)	Assembly and Wiring
(T01-99)	**Adjustment**
(X01-00)	**Correction**

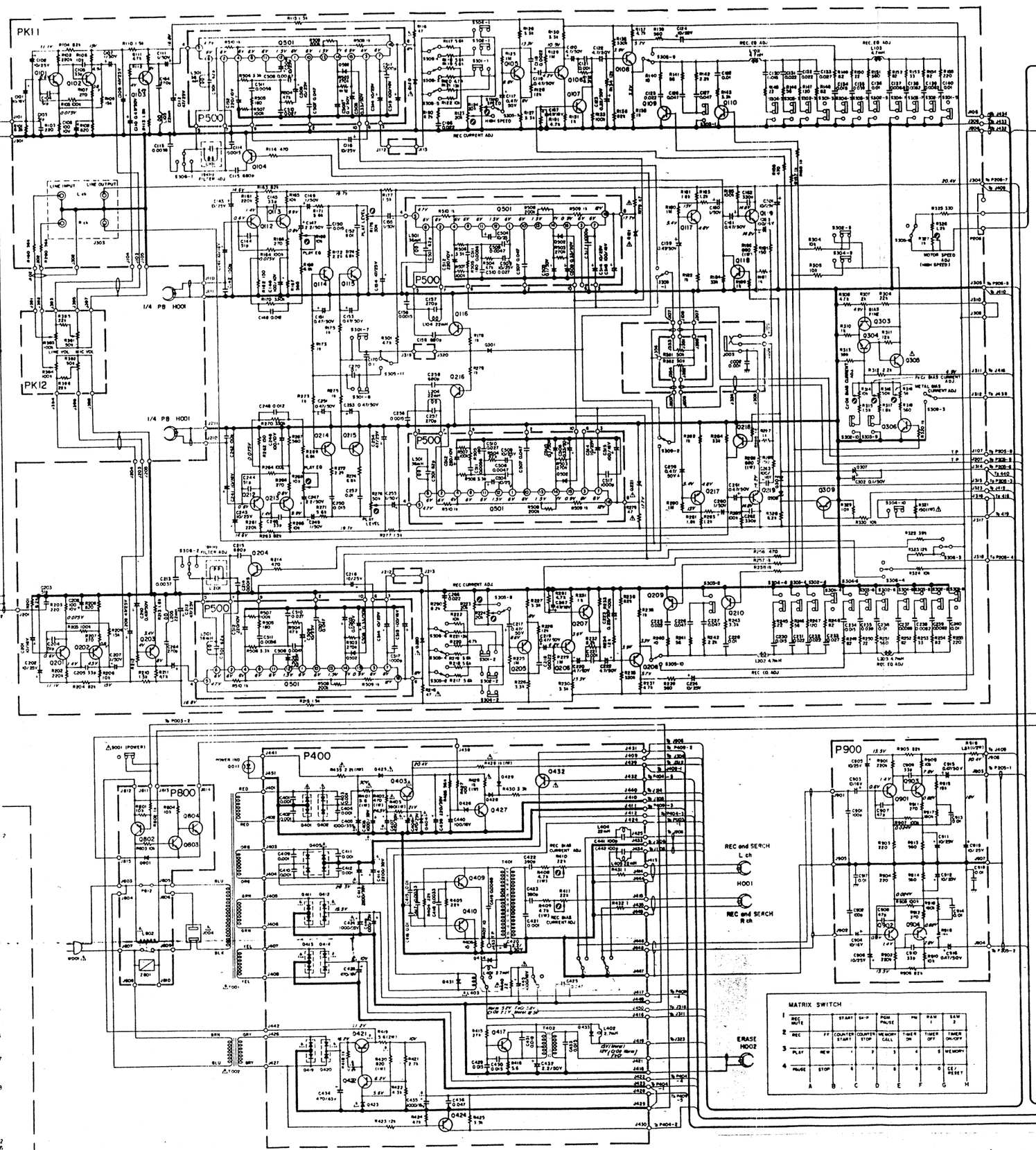
MODEL SD 9000 TECHNICAL SPECIFICATIONS (DIN)

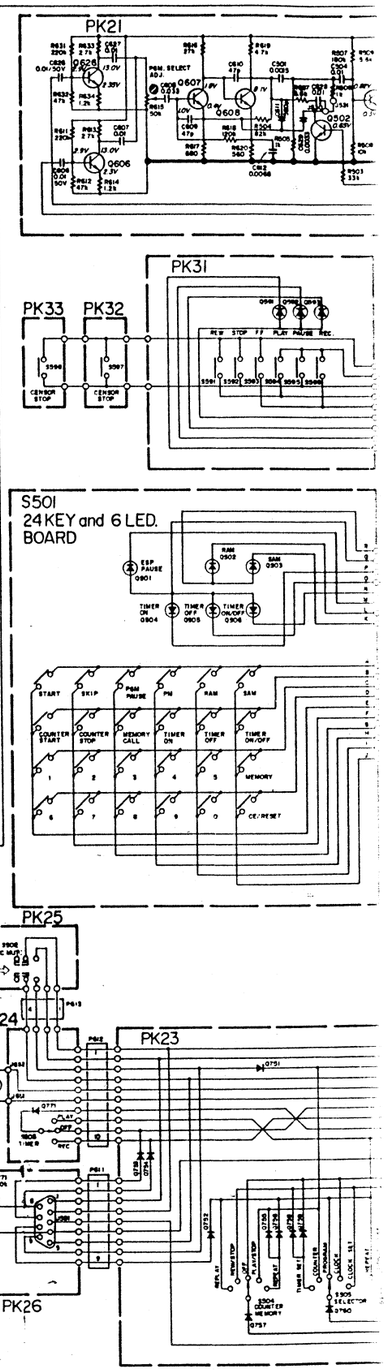
Style	Direct Load	
Tape Drive System	Single Capstan Drive	
Cartridge	Philips type compact cassette	
Track System	Compatible Stereo 4-track 2-channel	
Tape Speed	4.75 cm/sec. & 9.5 cm/sec.	
Heads	3 Head System	
Composition	Rec/Play: Sendust Alloy Erase: Ferrite	
Motor	DC Servo Controlled Motor x 2	
Meters	LED Peak x 2	
Recording System	AC Bias	
Erasing System	AC Erase	
Semiconductor Complement		
Transistors	132	
Diodes	119	
IC's	16	
LED's	15	
Overall Frequency Response (Dolby off):	Tape Speed:	Tape Speed:
Ferric Oxide Tape	at 20 dB for 4.75 cm/sec.	at 10 dB for 9.5 cm/sec.
CrO_2 Tape	25 Hz ~ 16 kHz (±3 dB)	25 Hz ~ 18.5 kHz (±3 dB)
Fe-Cr Tape	25 Hz ~ 17.5 kHz (±3 dB)	25 Hz ~ 19 kHz (±3 dB)
Metal Tape	25 Hz ~ 18 kHz (±3 dB)	25 Hz ~ 19.5 kHz (±3 dB)
	25 Hz ~ 18.5 kHz (±3 dB)	25 Hz ~ 20.5 kHz (±3 dB)
Total Harmonic Distortion		
Ferric Oxide Tape	2%	
CrO_2 Tape	2.5%	
Fe-Cr Tape	2.5%	
Metal	2.5%	
	Tape Speed: 4.75 cm/sec.	Tape Speed: 9.5 cm/sec.
Wow and Flutter (DIN WTD)	0.10%	0.07%
Fast Rewind Time	60 sec.	
Fast Forward Time	60 sec.	
AC Line Voltage	220V AC, 50 Hz	
(E/N versions are featuring an external voltage selector for use on 110/220V. T/A versions 220/240V AC, 50/60 Hz.)		
Power Consumption	63W	
Dimensions (W x H x D)	416 mm x 146 mm x 243 mm	
Weight	9.1 kg	

Model SD 9000









Q0001 HW10001030 PHOTO CUPLER

Q0002 ~ Q0004 H020023100 IOE-ILF

Q714 H110009300 AR2132D

Note on safety: The parts marked with ⚠ are important parts on the safety. Please use the parts having the designated parts number without fail.

SWITCHES
S301: TAPE SELECTOR
S302: TAPE SELECTOR
S303: TAPE SELECTOR

Q001
HW10001030
PHOTO CUPLER

Q002～Q004
HD20023100
IOE－ILF

Q714
HI10009300
AR21320

Q101～Q103,Q105,Q106
Q108,Q112,Q113,Q117
HT314001E0
2SC1400(E)

Q104,Q109,Q110
Q114～Q116,Q118,Q119
HT309451P0
2SC945(P)

Q120,Q121
HD30030090
WZ177

Q201～Q203,Q205,Q206
Q208,Q212,Q213,Q217
HT314001E0
2SC1400(E)

Q204,Q209,Q210
Q214～Q216,Q218,Q219
HT309451P0
2SC945(P)

Q220,Q221
HD30030090
WZ177

Q301,Q302
HD26011050
IS1555

Q303,Q304,Q306,Q309
HT309451P0
2SC945(P)

Q305
HT403131E0
2SD313(E)

Q307
HD30033090
WZ052

Q308
HD30057090
YZ052C

Q401,Q411,Q413,Q419
HD20020080
MI－151R

Q402,Q412,Q414,Q420
HD20019080
MI－151

Q403,Q421
HT403131F0
2SD313(F)

Q404
HD30048090
WZ－210

Q405
HD20008290
S4VB (RED)

Q409,Q410,Q417
HT313841R0
2SC1384(R)

Q422,Q424,Q427
HT309451P0
2SC945(P)

Q423
HD30015060
R056EB2

Q425,Q431,Q433,Q434
HD20022100
IOE－I,FA

Q426
HD30024090
WZ－120

Q428,Q429
HD20011050
IS1555

Q432
HT403131E0
2SD313(E)

Q501
HC10001360
LM110IAN

Q502～Q505,Q507
Q510～Q513,Q515～Q517
Q522～Q524,Q526,Q528,Q530
Q532～Q544,Q547～Q549
HT326341S0
2SC2634(S)

Q501,Q506,Q508,Q509
Q545,Q546
HT326341T0
2SC2634(T)

Q514,Q525,Q527
Q529,Q531
HT320601R0
2SC2060(R)

Q502,Q518,Q550～Q556
Q559,Q560,Q563～Q582
Q584,Q586～Q591,Q594～Q599
HD20011050
IS1555

Q557,Q558
HD10004020
IN34A

Q561
HD30013060
RD1IEB3

Q562
HD30014060
RD24EB2

Q591
HI10015020
LN317GP

Q592
HI10016020
LN417YP

Q593
HI10014020
LN217RP

Q600,Q601～Q603
Q647,Q648
HD20011050
IS1555

Q601,Q602,Q606～Q608
Q621,Q622,Q626,Q643
HT326341S0
2SC2634(S)

Q603,Q604,Q623,Q624
HD10004020
IN34A

Q605,Q625
HD30031090
WZ061

Q642
HT403131E0
2SD313(E)

Q644
HD30033090
WZ052

Q645,Q646
HT309451P0
2SC945(P)

Q651,Q671
HC10001320
LED.

Q652,Q672
HI11201320
LED.

Q701
HC10027060
μPD546C

Q702,Q703
HC10016060
μPA57C

Q704
HC40230000
μPD4023C or MC14023

Q705
HC45280080
μPD4528C or MC14528B

Q706,Q707
HC40110000
μPD4011C or MC1401

Q711～Q713,Q775
HT326341S0
2SC2634(S)

Q714
HT320601R0
2SC2060(R)

Q715,Q716
HQ10201020
LN524RK

Q751～Q761
Q762～Q774
HD20011050
IS1555

Q801
HD20022100
IOE－I,FA

Q802
HT106841R0
2SA684(R)

Q803,Q804
HT309451O0
2SC945(O)

Q901～Q904
HT314001E0
2SC1400(E)

Q711～Q713
HI10014550
TLR226

Q714
HI10009300
AR21320

Q772
HT107331P0
2SA733

QM01
HC10004250
CX－065A

QM02,QM03
HT106841R0
2SA684(R)

QM04,QM05
HT313841R0
2SC1384(R)

QM06,QM07,QM09
QM11～QM14,QM19
HT309451R0
2SC945(R)

QM08,QM10
HT403131E0
2SD313(E)

QM15～QM18
HD20011050
IS1555

QM20
HF200301C0
2SK30A(Y)

QM21
HC10040060

QM22,QM23
HD10004020
IN34A

(N)TYPE ONLY		(U,C)TYPE ONLY
Q107,Q207 HT402272A0 2SD227(O or Y)	Q111,Q211 HT309451P0 2SC945(P)	Q107,Q207 HT320011K0 2SC2001(K)
	Q421 HT407181B0 2SD718(O)	Q421 HT403131F 2SD313(F)

PK21 PK22 PK23 PK24 PK25 PK26 PK27 PK31 PK32 PK33

S501
24 KEY and 6 LED.
BOARD

PM01

Components and wiring are subject to change for modification without notice.

important
se the parts
rs number

SWITCHES

S301: TAPE SELECTOR (NORMAL)
S302: TAPE SELECTOR (Special/CrO)
S303: TAPE SELECTOR (FeCr)
S304: TAPE SELECTOR (Metal)
S305: TAPE SPEED SWITCH (STANDARD)